



January 25, 2008
VA Air Board Public Comment Hearing
Potomac River Generating Station Draft State Operating Permit (Dec. 21, 2007)

Speaker: Mike Stumpf, Plant Manager Potomac River Generating Station

Thank you and Intro

- My name is Mike Stumpf and I am here representing the some 150 employees who work at the power plant. I have worked at PRGS for over 9 years and am proud of the service we provide – producing reliable, affordable electricity safely.
- Thank you for this opportunity to make a few brief comments regarding the Draft State Operating Permit dated December 21, 2007 for the Potomac River Generating Station. Generally, Mirant is supportive of this permit as the draft reflects many months of discussions and hard work among Mirant, the staff of the DEQ, this Board, and the City of Alexandria and its residents. The company will file more detailed comments for the record on the 29th.
- This permit will guarantee operations at levels protective of the National Ambient Air Quality Standards (NAAQS) and reduce ground-level concentrations of emissions improving air quality, not only locally but regionally, upon completion of the stack merge project.

Downwash

- I want to give a brief history of how we got here today to talk about a stack merge as part of a state operating permit.

Potomac River Generating Station began operations in 1949. Due to the proximity to National Airport, the airport restricted the height of the stacks to what they are today, 165 ft. This is generally much lower than most other power plants but at that time, the City and region looked much different than it does today.

Three years ago a study was conducted to analyze ground level emission concentrations. The results of the modeled study surprised everyone. The study found a phenomenon known as downwash. The modeling analysis showed that in some worst case weather scenarios, combined with the shorter than usual stacks, ground level ambient levels of sulfur dioxide could exceed the National Ambient Air Quality Standards (NAAQS).

As a result of this study, Mirant voluntarily shut down operations and set our engineers to task to find a solution.

The engineers looked at every possible scenario to solve this downwash problem, including physically increasing the height of the stacks as approved by the Federal Aviation Authority (FAA).

Mirant knew that would not achieve the results we wanted.

Finally, a two part solution to eliminate the downwash concern was identified:

1. First, reduce Sulfur Dioxide
 2. Second, internally merge the stacks without actually raising them an inch but achieve the same desired results.
- The Draft Permit before us today completes the solution: maintains reduced emissions at levels protective of the NAAQS and allows us to complete the stack merge to eliminate downwash and improve air quality locally and regionally.

Emission Reductions

- Installing the Trona system to reduce SO₂ is not the only improvement made to the Potomac River plant – it is one of many. Current operating practices that are benefits to the environment and air quality that will continue under this permit are
 1. Use of low sulfur coals – historically, this plant utilizes $\leq 1\%$ sulfur content coal
 2. Use of Electrostatic precipitators (ESPs), both hot and cold technologies for the capture of particulates. These are a unique and innovative use of the technology for this plant.
 3. Use of our low NO_x burners and SOFA technology
- Since the installation of our dry sorbent system in late 2006 to reduce SO₂ emissions (we are currently using a product called Trona), the plant has seen dramatic and impressive reductions in emissions, well over 60%. We've also seen reductions in fine particulate matter.

Our NO_x emissions have consistently been at levels protective of the NAAQS and this permit will continue that level of reduction

- We expect that you will hear comments tonight requesting that the Draft Permit be modified to require the installation of baghouse technology to capture particulate matter. Nothing in the modeling data provided to DEQ supports the conclusion that greater operating performance and capture of fine particulate matter will improve with a baghouse. In fact, the modeling shows data consistent with or better than what is historically achieved with a baghouse. We are not objecting to this technology because we don't want to install technology, our history demonstrates our commitment to operating improvements. Rather we object to installing technology that does not perform. At a recent engineering review with manufacturers of this baghouse technology, the firm would not guarantee performance equal to what we are currently achieving!

Today our operating technologies with the hot and cold ESP achieves over a 99% capture of particulate matter! So this performance combined with reduced emissions levels from current operating permit limits is more than protective of the NAAQS.

- Under this proposed 2-stack draft permit, Mirant Potomac River will be held to overall lower emission rates than in the proposed draft 5 stack permit and with the stack merge completed will improve local and regional air quality.

Stack Merge

- I know we've heard a lot about the proposed stack merge the past several months and I'll make a few comments specifically to that matter and wrap up my comments.
- Is it or isn't a benefit to the regional air quality?
- Computer modeling shows the stack merge is the right investment to resolve a very specific phenomenon – downwash. The stack merge will also improve the regional air quality by reducing the overall concentration of emissions in the ambient air.
- Mirant Potomac River generating station will achieve the same results with its internal stack merge as other power plants do with much taller stacks. When this plant was located in 1949, the restrictions on the stack height made sense at that time.
- The stack merge and the proposed operating permit make sense today.
- As will be discussed in greater detail in our written comments, I would like to explain the installation schedule for the stack merge, if this permit is issued. Because of PJM (the regional electric grid operator) rules, which prevent outages during the summer months, we will complete the baseload units 3, 4, and 5 during the spring outage period and will be able to complete the cycling units, 1 and 2 this Fall. This protects the electric grid's reliability during the summer months.
- At all times Potomac River will operate in a manner protective of the NAAQS and consistent with this permit.

Conclusion

Again, I want to thank you for the opportunity to provide these comments regarding the draft permit on behalf of the employees of Mirant Potomac River Generating Station. The Company will file more detailed comments as requested by the 29th. Thank you for your time.